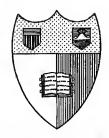
RE-EDUCATION AN ANALYSIS OF THE INSTITUTIONAL SYSTEM OF THE U.S.

GEORGE E BARTON



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AN ANALYSIS OF THE INSTITUTIONAL SYSTEM OF THE UNITED STATES

AN ANALYSIS OF THE INSTITUTIONAL SYSTEM OF THE UNITED STATES

BY

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BOSTON AND NEW YORK
HOUGHTON MIFFLIN COMPANY
The Aibergide Press, Cambridge
1917

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Published November 1917

TO MY SISTERS M. B. AND B. M. B. TO E. W.

AND TO MY FRIENDS J. P. H. AND F. L. P.
WITHOUT WHOSE ASSISTANCE
AND ENCOURAGEMENT
IT COULD NOT HAVE BEEN WRITTEN
THIS BOOK IS GRATEFULLY
DEDICATED

It is commonly asserted that a citizen of the United States can think of nothing but making money. If this is true, and if it is also true that "a penny saved is a penny earned," this book should interest that citizen. If it is untrue that the American business man can think of nothing but making money (and I believe that it is untrue), there is much in this book which should be enlightening to him.

It has been written with him especially in mind.

But, though the ordinary citizen is able to think clearly upon serious subjects, it must be admitted that many fail to do so. This is due largely to the fact that many accept, without question, the opinions of their favorite newspapers and magazines upon most subjects of national or of social importance.

While in most instances the editors and the staffs of the newspapers and magazines are better fitted to deal with important subjects

than are the majority of their readers, unfortunately, those editors and staffs are often more concerned in writing such articles as will please their subscribers, thus making their papers sell, than in carefully moulding the opinions of those subscribers.

Likewise, this is characteristic of the trustees and managers of many of our institutions. The reports from the church, the hospital, the school, the charity, while not actually misrepresenting facts, often are so phrased as quite to mislead the reader who, through inexperience, is unable to analyze them. This effort to make apparent a great need, on the part of the particular institution exploiting itself, succeeds in making the business man "come across" with the subscription, for which purpose the report was written. On the other hand, this policy often makes the business man wonder why, with the enormous and constantly increasing amounts of time, energy, and money spent upon religion, social betterment, education, sickness, insanity, etc., the conditions of society appear, if not worse, at least not greatly improved.

Able analyses of social conditions are apt to be thrown aside as "high-brow stuff" by the ordinary business man. And that business man, feeling himself incompetent to deal with the complicated problems of society, continues still to give and to give and to give, confident that the money may be safely entrusted to those who know more about the subject than does he himself.

In this, he is undoubtedly correct.

But, because he has for such a long time "come across" so easily and so generously, many managers of institutions have ceased to regard the money entrusted to them as being necessarily a part of the world of industrial affairs. His own individual undertaking seems to be so necessary to the welfare of humanity that each charity worker ordinarily feels justified in getting as much money as is possible for his particular undertaking, disregarding the fact that there must be a relation between the amounts which can be spent for any purpose, however praiseworthy, and the total production of a people.

There must be a limit somewhere to the

amount of time, energy, and money which can be expended by a State or an individual, however rich.

The author of this book has endeavored to regard the institutional system of the United States in that light, and to express the results of his investigation and thought in such a way as to be comprehensible to the ordinary business man.

No one believes in statistics, except the statistician. The statistician does not believe in statistics unless he has compiled them himself. If he has compiled them himself, he knows how many other results, in addition to his deduction, he might have proved from the same figures. While, therefore, it will be necessary for me to introduce many figures as proof of some of the rather unusual statements which I shall make, I shall endeavor to express the results of my inquiry less by an appeal to statistics than to that of ordinary "good business" sense.

The sociologist, the economist, the university professor will doubtless be annoyed frequently at the methods used for the expres-

sion of ideas and facts commonly handled in an entirely different way. To them I offer no apology.

I have no quarrel with the church or the hospital, nor with any of the other institutions that are working for the good of humanity.

But a number of years spent in practical work along lines of education and of social betterment, combined with years spent in the meeting of industrial conditions necessitated by the practice of architecture, so unite as to make me believe that there are some fundamental weaknesses or fallacies in our present system of dealing with education, sin, insanity, and disease.

Restrained by no board of directors, without the necessity of considering the terms of any deed of gift or pre-established policy, with nothing to gain and nothing to lose, I offer to the United States business man the results of my investigations, believing that the time has come when it is absolutely necessary for the business man to consider these facts.

I am indebted to so many individuals and to so many institutions for advice and assist-

ance, that to name them all is impossible. I wish, however, to express my thanks especially to Dr. John A. Hornsby, to Professor Charles Foster Kent, and to Miss Marguerite Barton.

All figures given and all references made to conditions in Europe (except those upon the subject of Re-Education, distinctly so stated) refer necessarily to the period before the present European war.

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AN ANALYSIS OF THE INSTITUTIONAL SYSTEM OF THE UNITED STATES

1. SOMETHING FOR NOTHING

Reprehensible it may be, but man's desire to get as much as he can for little or for nothing is not unnatural.

The search for those lands which would yield the most palatable fruit for the least exertion—the heaviest fish for the lightest net—the largest crop for the least cultivation—was the determining factor of the commercial geography in the earliest ages. In those days, if there was not food enough for all, the hungry ones moved on, seeking the Indies or Prester John—some land or government, tales of which (slowly carried by weary traveler or crawling caravan) sounded ever the alluring note of "something for nothing."

It is reasonable for men to seek those lands in which they can most easily gratify their desires. It is inevitable that such lands should be sought by the greatest number.

But conditions, altogether satisfactory when

there are two cocoanuts for each man, cannot be maintained when there are two men for each cocoanut. Strife results, and soon the right of the strongest is curtailed by "law" which is society's first denial of the individual's right to "something for nothing."

Society, in refusing to admit the hungry man's right to satisfy his appetites in the easiest way, begins a procedure, which, simple and obvious at first, grows rapidly into a most complex and elaborate burden when large numbers of men seek to occupy restricted districts. This burden is further complicated by the fact that the restrictions placed by society upon man's desire to get "something for nothing" tend to aggravate, rather than to overcome the desire itself.

A certain proportion of a population always revolts at the restrictions put upon privileges and property which were expected to be "free." Society is obliged to bribe or to coerce the revolting members in order to maintain itself.

If society admits an obligation to the hungry man when denying his right to take "some-

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thing for nothing,"—that is, the obligation of feeding him while under restraint, — the man has in reality got what he sought — food. And, while in a sense he has "paid" for it, his payment is not in the form of productive work but of resistance. And, while resistance is sometimes of value, in this case it only increases the burden of the institution society endeavors to maintain. Revolt (resistance) against the restrictions put, not only upon property, but also upon health and morals, is almost the only result of the present system.

A community, rich in money, of a high grade of intelligence, and with a sincere charitable impulse, takes justifiable pride in the institutions which it provides for those of its members who refuse to live up to its standards. But the endeavor to make its corrective or curative processes as efficacious as possible often leads not only to a high state of excellence (so far as the institutions themselves are concerned), but also to a life which is accepted by those in revolt as a satisfactory substitute for that which they are compelled to renounce.

Tales of such institutions are carried over

the earth (no longer by slow caravan) and are listened to by the hungry ones of other lands. These malcontents, having no understanding of the significance of the institutions, instinctively regard them as on a plane with the fruits of the Indies and the gold of Prester John. They consider the institutions founded and maintained for cure and correction as, in themselves, being "something for nothing."

2. THE NECESSITY FOR WORK

What we mean by "life" is energy made manifest in matter: "death" is merely the result of a transference of power. If one machine is idle, it is only because the power is being used in another part of this great plant we call "the world." Steam is always kept up. No living creature—man, beast, fish, bird, or insect—ever has existed, or possibly can exist, upon this earth without the performance of an amount of work (the expenditure of an amount of energy) equivalent to the value of the commodities consumed by that being. The mulley cow, contentedly chewing her cud, the hunter for orchids or edelweiss, the picker

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of Eve's first fig leaf, the producer of the latest Worth model, the honey bee, and the steel trust have all energized according to the value of the commodities consumed. If the amount of work necessary for self-support is not done by the being himself, it must be done for him by other beings.

Therefore, when we find a society caring for a large number of dependents, and devoting a very considerable proportion of its time, energy, and money to their support, it is not impertinent to consider:—

- Why so large a proportion of the population is dependent;
- For what professed, and for what true reason, this dependent class is being supported;
- Whether the methods employed are showing a sufficient improvement in social conditions as a whole to justify their continuance or development;
- Whether the institutions are so founded as to insure permanence;
- Who is doing the extra work necessary for the support of these dependents;

Whether these individuals will be able to continue that support

1st, as under existing conditions;

2d, according to the ratio of growth;

If it appears that they cannot continue that support, how can such change be made with the least waste to the existing organizations?

3. THE NEED FOR IMPROVEMENT

Judging from the utterances of the press, the lecture platform, and the pulpit, it seems that the vast majority of the people of the United States—even of the thinking classes—consider the institutions of our country as being not only satisfactory, but permanent.

The popular opinion is that our institutions are making very considerable headway against the onslaught of sin, insanity, and disease, if, indeed, they are not entirely overcoming them. That opinion is not shared by the individuals most closely in touch with the actual conditions of our corrective and curative endeavors.

The first division of my effort will be to

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show in simple terms what the actual condition of our institutional system is, and what we may expect it to be if the fundamental laws of physics and of finance hold true.

4. A COMPREHENSIVE VIEW NECESSARY

It seems that, up to the present, society has regarded only the different elements — that is, each separately — which made up its institutional system as a whole. The prison, the hospital, each branch of dependent life, has received careful and elaborate analysis, investigation, and, in general, well-deserved praise.

But society should consider not only whether this or that particular branch is economically fulfilling its obligations. It should also consider whether or not the sum total of all the efforts of these different factors is producing a change in the life of society, outside of the institutions, of sufficient importance to justify the total effort. For, if our system is what we like to believe, it is not enough to glory in the fact that the searing-iron, the ball and chain, and the belt and bracelets have given way to more humane methods of treatment. Nor is it

enough to consider a decrease in the *per-capita* cost of maintenance as a proof of economical administration.

Statistics are inadequate for the expression of our institutional condition, especially when regarded as a whole. Tables of figures, by increasing or decreasing, do *not* show the value of a given institution to society.

The chemical equation is the only one now in common use which could be used to show the result of the institutional system. For example, by decreasing the impurities of the ingredients of a mixture of chemicals — even to a condition of purity — we do not eliminate a poison (if such is one of the resultants of the chemical action of those ingredients); and while that poison may be less impure, owing to the better ingredients used, it is, for the same reason, a more powerful poison. In other words, we are improving each of the separate divisions of our institutional system: but we are forming and liberating a condition of pauperism which is increased - and not decreased — as we improve each separate institution.

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5. WHY IT IS IMPOSSIBLE TO TAKE AN ACCOUNT OF STOCK

When a business man is in difficulty, or foresees difficulty, he takes an account of stock in order to find out what he has and where he stands. In the business world large amounts of time, money, and energy are considered well spent in the careful consideration of just what is succeeding, and what is failing, and why. It is difficult to see how the reorganization of a business could be effected if it was impossible to take stock.

But correctly to determine the efficacy of the different institutions devoted to dependents and to curative and corrective processes, is an undertaking doomed at present to failure. It is impossible to figure, with any degree of accuracy, what is the result of these institutions, or what is the total cost to the United States for the care of its dependents. It would be possible to describe a nail or a turning-lathe in simple language. But it would be difficult, if not impossible, to describe a screw — much more a screw machine — in anything

but complicated language, because their very essence is complex. And our institutional system is one of the most complex machines ever conceived by man. No amount of research can overcome the fact that there is no standard of records, often among like institutions in the same State. The institutional years begin at different dates; and institutions of the same class interpret definitions variously. Even the Bureau of Statistics of the United States Government, while possessing vast stores of useful information upon the subject, has never issued such figures as would make the amount of total expenditures alone possible to determine. The Government itself would be unable to get correct figures relating to certain phases of the work of some institutions maintained as private charities.

And, even if it could, such figures of expense, population, or assumed cure would not show the total value of the institution to society. In other words, we cannot take account of stock. However interesting to a few, to give

¹ Benevolent Institutions, Introduction, pp. 11-13. U.S. Department of Commerce, Bureau of Census, 1910.

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all the figures and tables relating to each phase of our dependent life would make the subject so involved as to be beyond the comprehension of one not already intimately acquainted with that subject.

But while the work of the different institutions (as between the insane asylum and the foundlings' home) is very unlike, there is a sufficient similarity existing between the essence of their endeavors to justify the belief that an analysis of one will be, for the purpose of elementary consideration, a criterion for the others. Fortunately, for the purposes of this investigation, the figures of one department of dependent life will be a sufficient indication of what the whole must be, if, indeed, they alone will not justify conclusions which are to be drawn.

6. AN INDICATION OF CONDITION

One of the institutions with which the public is best acquainted — with whose work it is most properly satisfied — is the hospital. While it is notorious that hospital figures are difficult to obtain, certain authoritative fig-

ures upon the hospitals *have* been formulated; and to those, for the moment at all events, we shall confine our inquiry.

In the Salutatory published in the first number of "The Modern Hospital," was the following statement:—

"There are in the United States 6665 institutions of record for the care of the sick, with a total capacity of more than 600,000 beds. By a modest estimate, these huge figures represent a money investment in land, buildings, and equipment of not less than \$1,500,000,000, and an annual outlay for maintenance approaching \$250,000,000.

"On the human side, there are more than 100,000 trustees ¹ of hospitals, and more than 65,000 physicians ² on hospital medical staffs. About 10,000,000 men and women contribute annually to hospital funds, and approxi-

¹ A figure fixed by law as the maximum of a standing army considered until recently sufficient for the protection of its interests along borders longer than that of almost any other country on earth.

² A number nearly twice that of all the civil service positions (33,464 — World Almanac, 1916, p. 168) necessary for the running of the Federal Government in the city of Washington.

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mately 9,000,000 men, women, and children are patients in the hospitals in the course of each year.

"The hospital, in its broader sense and in its many aspects, has already become a powerful influence on society, if indeed it is not now the chief factor in a process of remoulding and remaking the modern social fabric; its benign influence must be exerted in the future to divert the attention of the people away from the sordid pursuit of personal gain and selfish pleasure, and into an atmosphere pervaded by higher motives and more altruistic ambitions. But as yet there has been no welding together of the forces and influences that, even working separately and oftentimes in diverse directions. have such magnificent results. What may, then, be expected if all these agencies can be correlated and harmonized, and made to progress in one direction and toward a common beneficent goal?

"There is so much to be done. By common consent, based upon the needs of the time, it is decreed that there shall be a bed in a good hospital for every sick and hurt man, woman,

and child, and that every resource of medical skill, seconded by the highest order of trained nursing, and aided by all the arts and sciences, shall be at the service of rich and poor for the cure of disease. But it is no longer enough that those who can shall merely help to cure disease; the time is come when the prevention of disease looms larger than the cure, and in this field the hospital must show the way, again by the aid of the sciences and the arts, directed along the lines of hygiene, sanitation, pure living, and right thinking.

"Even here the hospital finds no pause. Men were not born free and equal; the scales of justice have not weighed for all alike; the gentle dews of heaven have not rained down upon the just and the unjust in even portions; and so it becomes the task of to-day and the duty of the hospital, again in its larger sense, to help overcome the irregularities of birthright, to even the balances that have weighed so badly, and to bring to the lowly and the oppressed the beneficences of Faith, Hope, and Charity."

This Salutatory was written, and the figures

were compiled by one of the editors,1 admittedly the highest authority upon the subject. They were accepted by the Committee on Hospital Efficiency of the Philadelphia County Medical Society in its reports of June 17 and November 26, 1913, and October 21, 1914. They are greatly in excess of the figures given by the United States Government, 2 owing probably to the fact that the Government was obliged to depend entirely upon the figures given in the returns, while Dr. Hornsby gave special consideration to each individual hospital. But while the figures of "The Modern Hospital" are larger than those of the Bureau of Statistics, they are not greatly in excess of those determined by the Federal Commission on Industrial Relations.

Another careful observer and deep student, Dr. Gilman Thompson, has made investigations tending to show that those figures, although terrifying, are not far from correct.³

But though the practice of sending the sick

¹ Dr. John A. Hornsby.

² World Almanac, 1915, p. 291.

³ W. Gilman Thompson, M.D., The Occupational Diseases, p. 6.

of all classes of society to hospitals is growing rapidly, there is still a large percentage of sickness cared for in the home. And if we accept those authoritative figures as correct, and anything approximating one tenth of our total population is dependent from sickness alone, some idea can be formed of what the total number would be if we include every man, woman, and child dependent out of our one hundred million population. Surely, this is a condition of which any business man should take cognizance.

"June, 1910, was signalized by the meeting in Chicago of the first National Conference on Industrial Diseases, and in a memorial sent to President Taft by this Conference it was stated that there occur annually in the United States 13,400,000 cases of sickness among artisans and craftsmen, many of which are attributable to occupation hazards, involving a total annual economic loss of nearly three fourths of a billion dollars." 1

It is stated in the Bulletin of the Univer-

¹ W. Gilman Thompson, M.D., The Occupational Diseases, p. 6.

sity of the State of New York (no. 621, August, 1916, p. 8):—

"The economic loss from accidental deaths and injuries is nearly \$500,000,000 annually.

"We waste \$772,000,000 annually in loss of income due to industrial diseases, that is, diseases which attack workers on account of the nature of their employment and the unsanitary conditions in which the work is carried on."

And this is showing only such classified as occupational diseases and hazards. This does not include the loss caused by ordinary sickness. The Federal Commission on Industrial Relations gives annually 35,000 fatalities, and 700,000 injuries involving disability of over four weeks, as the figures due to occupational disability.¹

That Commission estimates that each one of the "wage-earners in the United States loses an average of nine days a year through sickness. At an average of two dollars a day, the wage loss from this source is over \$500,000,000.

¹ Final Report of Commission on Industrial Relations, p. 95.

At the average cost of medical expenses (six dollars *per capita* per year) there is added to this at the very least \$180,000,000." ¹

This annual loss of \$680,000,000 to \$1,272,-000,000 must be added to the cost of maintaining the hospitals. For society has not only to pay for the maintenance of the sick man, but also to bear the loss of his product, the value of which should consequently be added to the cost of maintaining the hospital as being a charge attributable to the same cause (sickness), so far as society is concerned.

Accepting the report of the Federal Commission, the most authoritative word upon the subject, we see that two items—that is, the loss of product and the cost of medical expenses—involve a loss of \$680,000,000 a year. But this is not capital—this is annual outlay. It does not even include depreciation, and it would be the interest at five per cent upon \$13,600,000,000.2

Taking the figures already given, as au-

¹ Final Report of Commission on Industrial Relations, p. 202.

² The estimated wealth of the country in 1912 was \$187,000,000,000. *Ibid.*, p. 9.

thorized by the University of the State of New York, \$772,000,000 and \$500,000,000, and adding to this the cost of maintaining the hospitals at \$250,000,000, and regarding that total as the interest upon the capital required, results in a figure which I am not afraid but ashamed to use.

The smaller figures of the Federal Commission, of \$500,000,000 and \$180,000,000, and the estimate of \$250,000,000 required to maintain the hospitals, have been selected as sufficient to give an idea of what the total cost of our entire dependent population is for all prisons, insane asylums, delinquent homes, institutions for the blind, deaf, dumb, crippled, epileptic, aged, poor, feeble-minded, infants, dipsomaniacs, and the whole range of infectious and contagious diseases from tuberculosis to leprosy, — in addition to all the other ills of man.

The rate of increase of hospitals alone previous to the war was one thousand a year.

"Until the war broke out there were being constructed in the country approximately one thousand hospitals a year for the past

three years; this would include considerable extensions to already existing hospitals, such as new wings. A great many of these new hospitals were state hospitals, running into the thousands of beds each, and municipal hospitals running into several hundred beds each; so that I think it fair to say that these improvements would average a hundred beds per hospital. A fair estimate of the cost of these hospitals would be about two thousand dollars per bed; very few of them are built for that. That would make each hospital cost \$200,000, or a total of \$200,000,000 per year. These figures are not being reached just now on account of the war, but they will be more than made up when the financial situation improves, because undoubtedly, we are at the dawn of a great hospital era. . . . "1

In other words, we are carrying an enormous "dead capital," much of which could be liberated.

7. A TRIAL BALANCE

Whatever the total number of dependents is, that number will approximate ten millions,

1 Personal letter from Dr. Hornsby.

ten per cent of the entire population. This figure itself is sufficiently large materially to decrease the number of wage-earners ¹ in the United States.

But all wage-earners are not producers,² and upon the producer must eventually fall the burden of maintenance. It is difficult to draw accurately the line between the wage-earner and the producer. Rather than introduce any contention as to the classification of any particular labor, I accept this number (twenty-five millions) of wage-earners as being the number of producers.

Even then we have to face the fact that twenty-five per cent of our population is not

1 Twenty millions to twenty-five millions. (Final Report

of the Commission on Industrial Relations, p. 2.)

² "A distinct classification adopted by the United States Census Bureau based on 1910 Census is as follows: All occupations, 38,167,336 (consisting of 30,091,564 males and 8,075,772 females) with per cent in parentheses showing distribution of total. Agriculture, forestry, and animal husbandry, 12,659,203 (33.2); extraction of minerals, 964,824 (2.5); manufacturing and mechanical industries, 10,658,881 (27.9); transportation, 2,637,671 (6.9); trade, 3,614,670 (9.5); public service (not elsewhere classified), 459,291 (1.2); professional service, 1,663,569 (4.4); domestic and personal service, 3,772,174 (9.9); clerical occupations, 1,737,053 (4.6)." (World Almanac, 1916, p. 125.)

only producing for its own maintenance, for the sixty-five per cent who are not producers, for all the expenses of the Government, for all the innumerable pensions 1 which are now being granted, for all churches² and foreign missionaries,3 but also expending huge sums for the benefit of the future in scientific research and education 4 and for social betterment, etc. Furthermore, they are carrying this additional and increasing burden of ten per cent of total population as parasites. And this in face of the fact "that seventy-nine per cent of the fathers of these families earned less than seven hundred dollars per year," and that, "in brief, only one fourth of these fathers could have supported their families on the barest subsistence level without the earnings

² Number of churches in United States, 1914, 225,486.

(World Almanac, 1916, p. 517.)

¹ United States Government pensions (1915 only), \$165,518,266. (World Almanac, 1916, p. 152.)

³ Number of foreign missionaries sent from United States, 1916, 10,048; annual income of boards and societies in United States, 1916, \$19,264,977. (Personal letter from Secretary Foreign Missions Conference of North America.)

⁴ Number of school-teachers in United States, 1914, 701,507. (Bureau of Statistics, prepared for World Almanac, 1916, pp. 581-85.)

of other members of the family or income from outside sources." 1

We send hundreds of millions of dollars to the distressed and orphaned of Europe, ship off cargoes of coal and grain and hospital supplies: and that at the very hour when the producer himself is cold, and hundreds of women with infants assail the New York City Hall, crying for bread! The religious fanatic may believe that such a course will perpetuate a great, free, prosperous country. The business man *should* not — the economist *cannot* believe such to be true.

8. HOW MUCH CAN ANY MAN DO?

Let us suppose that an individual is self-supporting, that he is able, without help, to take care of himself and of his immediate family. His neighbor falling sick, he may be able to care for his neighbor also and his neighbor's family, with extra work and economy, — and another neighbor, — all the people in his village. Perhaps he may be so strong

¹ Final Report of the Commission on Industrial Relations, p. 11.

that he can support every man, woman, and child in his State. But, somewhere or other, there is a limit to the amount which he can do, no matter how hard he strives, no matter how earnestly he prays to Heaven for extra strength and grace.

Irrespective of where that limit is, what will become of the institutions when that limit is reached?

Is our whole wonderful system, of which we have been so proud, doomed to extinction?

Would the organizations disintegrate?

Would the thousands of superb plants be scrapped?

Would the enormous amounts of time, energy, and money invested in them be thrown away?

If not, what departments would be discontinued for the sake of maintaining what other departments?

Would our universities, our asylums, or our hospitals be the first abandoned, and for what reason should they be the first?

What effect would be produced upon the minds of the people if they were forced to realize that the institutions regarded as safe, necessary, impregnable, and perfect could no longer be maintained?

The condition would be so chaotic as to be terrifying to the bravest mind, puzzling to the most intelligent one.

Our charitable impulses, combined with a certain childish pride in maintaining our reputation for charity, have enabled a great many, not only of the alien, but of the native shirkers, to exist in a condition of luxury. For it should be remembered that sufficient food, of whatever quality, and protection from the weather are luxuries to a large percentage of humanity. Every winter there are a large number of individuals who commit misdemeanors for the sole reason of being kept through the winter in our jails.

9. THE UNWARRANTED ASSUMPTIONS OF MANKIND

Man has no justification for assuming a congenital right to food, to health, or to happi-

ness. No being can have food without working for it — or by having it given to him by some one who has worked for it: no being can have health except by the understanding and practice of his abilities and his limitations: no being can have happiness as a gift, but only by energizing in the direction of the coincidence of his interests and his possibilities.

10. DIAGRAMMATIC EXPOSITION OF THE PROBLEM

Diagrammatically expressed, our institutional system can best be shown by its likeness to a gigantic top, having no foundation, and maintaining its upright position only so long as it is whipped into rapid motion. If for a single year our doctors, our clergymen, our social workers, our philanthropic citizens should by ceasing to agitate society fail to provide the hundreds of millions of dollars necessary, this huge, top-shaped institutional system of ours would topple over and roll into the ditch, because the whole system does not deliver, as a finished product, an adequate number of individuals in a short enough time, made

competent by their treatment, to provide a necessary interest upon the capital invested. Capital must not only pay interest upon itself; it must reproduce itself in order to maintain its integrity. For the annual allowance for "depreciation," which is necessary before legitimate interest can be paid, is only capital reproducing itself. With a rather exhaustive search, I have found but four institutions 1 which can even pay their running expenses — let alone depreciation, interest, surplus, or reserve. And if our system cannot do that, and also fails to return the dependents more competent from their period of incarceration, what is the real reason for supporting them?

11. CHARITY

I should be glad to be relieved of the necessity of discussing the subject of charity.

I said above that our institutional system, diagrammatically expressed, resembled a top. But if I introduce the top, it is necessary for

¹ The Detroit House of Correction, the Maryland Penitentiary, the Stillwater (Minnesota) State Prison, and an apprentice school (name withheld by request).

me to admit the peg upon which the top spins. That peg is the doctrine of brotherly love. The sages before the Christian era had already speculated upon the possible results of the development of this theory of brotherly love.

Chuang Tzu, writing in the third or fourth century B.c., says:—

"He who would attain to such perfection never loses sight of the natural conditions of his existence. With him the joined is not united, nor the separated apart, nor the long in excess, nor the short wanting. For just as a duck's legs, though short, cannot be lengthened without pain to the duck, and a crane's legs, though long, cannot be shortened without misery to the crane, so that which is long in man's moral nature cannot be cut off, nor that which is short be lengthened. All sorrow is thus avoided.

"Intentional charity and intentional duty to one's neighbor are surely not included in our moral nature. Yet what sorrow these have in-

¹ Translated from the Chinese by Herbert A. Giles, pp. 101-02.

volved. Divide your joined toes and you will howl: bite off your extra finger and you will scream. In one case there is too much, in the other too little; but the sorrow is the same. And the charitable of the age go about sorrowing over the ills of the age, while the non-charitable cut through the natural conditions of things in their greed after place and wealth. Surely then intentional charity and duty to one's neighbor are not included in our moral nature. Yet from the time of the Three Dynasties downwards what a fuss has been made about them!

"Those who cannot make perfect without arc, line, compasses, and square, injure the natural constitution of things. Those who require cords to bind and glue to stick, interfere with the natural functions of things. And those who seek to satisfy the mind of man by hampering with ceremonies and music and preaching charity and duty to one's neighbor, thereby destroy the intrinsicality of things.

"For such intrinsicality does exist, in this sense: — Things which are curved require no arcs; things which are straight require no lines;

things which are round require no compasses; things which are rectangular require no squares; things which stick require no glue; things which hold together require no cords. And just as all things are produced, and none can tell how they are produced, so do all things possess their own intrinsic qualities and none can tell how they possess them. From time immemorial this has always been so, without variation. Why then should charity and duty to one's neighbor be as it were glued or corded on, and introduced into the domain of Tao, to give rise to doubt among mankind?

"Lesser doubts change the rule of life; greater doubts change man's nature.

"How do we know this? By the fact that ever since the time when Shun bid for charity and duty to one's neighbor in order to secure the empire, men have devoted their lives to the pursuit thereof. Is it not then charity and duty to one's neighbor which change the nature of man?"

It is far from my purpose to attack the doctrine of brotherly love. An unbiased, critical analysis of the development of our institu-

tional system, and of its effects upon society at large, forces me, however, to the conclusion that either, first, Christ was wrong; second, his doctrine is unfitted for the industrial age in which we live; or, third, HIS DOCTRINE IS BEING MISINTERPRETED.

Since the beginning of Protestantism the parable of the Good Samaritan has been accepted as the fundamental upon which human institutions should rest. That it may be the parable of greatest significance may or may not be true. I know of no way by which it could be proved or disproved. But though it may be the greatest, it is not the *only* word of our Lord upon the subject of charity; and I cannot see that any one has the authority or the right to take the parable of the Good Samaritan as the final and complete exposition of man's duty to his neighbor.

The best authority ¹ gives the expense of running the hospital alone as \$250,000,000 a year. Another high authority ² has admitted

¹ The Modern Hospital.

² Introduction to *Philadelphia County Medical Society Report*, June 17 and November 26, 1913, October 21, 1914.

that fully twenty per cent of this, or \$50,000,-000 a year, is waste.

An annual expenditure of \$250,000,000 is nearly five times the gross income of the Pennsylvania Railroad. With all contentions for charity allowed, our hospitals alone involve an amount of business probably greater than that of any other business in the world.

With all respect, it should be remembered:—

"And when they were come, they say unto him, Master, we know that thou art true, and carest for no man: for thou regardest not the person of men, but teachest the way of God in truth: Is it lawful to give tribute to Cæsar, or not?

"Shall we give, or shall we not give? But he, knowing their hypocrisy, said unto them, Why tempt ye me? bring me a penny, that I may see it.

"And they brought it. And he saith unto them, Whose is this image and superscription? And they said unto him, Cæsar's.

¹ Gross income for 1914, \$51,792,223.42. (Pennsylvania Railroad Report, 1914, p. 2.)

"And Jesus answering said unto them, Render to Cæsar the things that are Cæsar's, and to God the things that are God's." 1

12. WITH EVERY GAIN THERE IS A LOSS 2

Even the prevention of disease may be attended by results as powerful and distressing as was the disease prevented. Typhus fever uncontrolled might well have stopped a war that has cost more misery, pain, and destruction than any plague in history. And it is fair to question if man's methods are proving themselves to be more "humane" than were God's.

It is very meet and proper for us to utilize science to its utmost possibilities. It is not meet and proper to place science beside Baal and the golden calf.

"Thou shalt not bow down thyself unto them, nor serve them: for I the Lord thy God am a jealous God, visiting the iniquity of the fathers upon the children unto the third and fourth generation of them that hate me,

¹ Mark xII, 14-17.

² To every action there is an equal and opposite reaction. (Third law of motion.)

"And shewing mercy unto thousands of them that love me and keep my commandments." 1

By his own example, Christ showed his attitude to pain, disease, and death not to be in accordance with our present one. For if we believe that He had the power to cure disease and to raise the dead, unless that power was very limited, we must also admit that He used it very sparingly.

Our present attitude would insist upon its constant and all-inclusive exercise until all pain, all sin, all death were overcome. There is reason for believing that Christ did not consider the alleviation of pain to be the greatest work He had to do either for man or for God.

13. WHAT ARE WE TRYING TO DO?

The first consideration of Re-Education should be devoted to the therapeutic and the educational effects, and not to the value of possible product. For what we strive to accomplish is a more effective institutional system rather than a new way of "making

¹ Deuteronomy v, 9, 10.

money." Therefore, the first subject to consider is the effect upon society which the institutional life should produce.

What are we going to teach? If we admit the possibility of Re-Education, the question to be answered apparently is, "What subject shall we teach?" I say "apparently" because in reality that is not the first question. The search for possible occupations for the sick, sinful, and insane has been accepted as the question in the past. It seems to me, however, that we must again pause first to ask, not "What are we going to teach?" but "What are we endeavoring to do?"

What is the object of our effort? Careful consideration of the charitable endeavors of the past one or two centuries tends to make an unprejudiced observer believe that many, if not most, of those endeavors have been made to satisfy or to prove some pet theory or desire of the benefactor; that, in brief, much of our "charity" should be credited to our desire to have our own way, and only secondarily to improve the conditions which we are prone to believe are the main object of our attack. What

should we teach? Is it merely to get the sick man physically well, or is there and should there be something beyond a state of physical well-being which may be or should be sought? If so, then, in the case of the incurable, to put him to death in a manner as painless for him as possible, and the least objectionable to society, seems to be the logical conclusion. If not, and if we are justified in working for more than physical well-being, then we should, indeed, strive to keep him alive, but, furthermore, we should keep him alive for some purpose, for some reason.

For what reason, for what purpose, should we endeavor to keep the sick man alive? Is it not that he may accomplish the best of which he is capable?

Here again we find a radical departure from one of the doctrines of the United States. But, however much we cherish the spirit of our democracy, — however great we know the value of individual effort and possibility to be, — it is time for us to admit that the ancient slogan that "any boy can become President" is not only misleading but false. That all men

are born equal may or may not be true. The question does not enter into my inquiry. That all who have the same amount of work expended upon them produce the same results cannot be maintained, and is not maintained, so far as I know, by any educator of experience. One of the reasons for this failure is that it is impossible, under our present system, in dealing with large numbers of people, to devote much time to individual instruction. Individual instruction is necessary to many minds, even to the most brilliant, and it should be noted that there are doubtless many minds now classed as defective, and treated as such, which may in reality be superinstead of sub-normal.

One instance of this in my own personal experience is the case of a boy who was long considered defective and sub-normal. In all the great educational system of New York City there was no place for him. He was on the verge of being transferred to the dependent class, — about to be started upon a career which would have transferred him from one institution to another, with a constantly de-

creasing belief in his own ability, and with a constantly increasing expense to the community. With less than two weeks' training he was returned to New York City, placed in a position for which he seemed qualified, in less than seven months had had his salary doubled, and, instead of becoming a charge upon the city at seventeen years of age, became the support of his blind father.

Fixed standards are necessary when dealing with large numbers of people. But if the fixed standard is not met, the individual is necessarily classed as defective, irrespective of any super-normal ability in unusual, unstandardized lines.

This makes it advisable, as many people maintain, for vocational guidance, especially in the secondary schools, before the pupil is allowed to select his optional course. But the consideration of the amount of time necessary for the thoughtful investigation of each pupil in any one of our large cities makes all realize that such investigation is an impossibility. It is exceptionally difficult, if not impossible, to determine, or to do more than guess, what

progress the pupil will be capable of making in later years before he has had experience in the world, in the handling of his tools, so to speak.

But at what period in later years would it be possible for him to stop and begin again? Only when, by reason of his admitted inability to get on, he is forced to do so by his family and friends, for his and their own good; or when forced into retirement by a society which declares his condition dangerous to itself—in other words, when he ceases to be able to maintain his existence as a free and independent citizen and becomes a dependent upon society.

Now, to recapitulate, is it not the duty of society, either to dispose of him as easily as possible, or to endeavor so to treat his weakness that, upon his return to society, he may succeed instead of failing again? Admitting this, it would seem that he should be so treated and trained in the institutions as not only to be restored to physical and mental health, but to be fitted for remunerative labor later, in order that, ceasing to be dependent himself, he may take his place with those workers who maintain the institutions for dependents. But

in order to do this he must be trained for something which society needs, and, needing, will pay for as a purely commercial transaction, without the question of further charity entering into the purchase of his product.

"It should be remembered that a return in money is not the only way by which a patient can remunerate society for his support and for the loss of his produce.

"If the patient can be sent back to his old job (in which it appears the majority always succeed better) with resistance so increased as to preclude further activity of the disease, that extra strength may be compared to 'surplus' or 'reserve'; if he has utilized the months or years spent in treatments in fitting himself to do his job better than he did it before, his gain in efficiency may be fairly considered an 'interest' upon the capital necessary for his support.

"If in addition he can, while under treatment, produce marketable goods of commercial value, that product may be classed as 'improvement of property,' decrease in 'running expense,' or 'unearned increment,' as the case

may be, all of them items of such significance that 'masters of finance' disregard them in not the slightest degree anywhere except in the institutions." 1

What will society pay for? What does society need?

These are the questions which must be answered before the question of what we shall teach can be approached.

14. SIZE OF THE DEPENDENT POPULATION

In order to give an idea of what our present condition really is, and in lieu of many pages of statistics, suppose that some great calamity—earthquake, conflagration, famine, and pestilence—has swept over the six New England States, and that in all that rich territory there is no man, woman, or child unaffected.² From every State in the Union streams of gold, food, and clothing would flow for their relief. Hosts of energetic men, armed with tools and machines, would at once invade the stricken dis-

¹ Barton, Occupational Therapy, pp. 50, 51.

² Population of New England, 6,552,681. (World Almanac, 1916.)

trict with determination, and would toil ceaselessly until the people of New England were upon their feet again, — were once more running their factories, sailing their ships, — until they were once again upon a self-supporting basis. It is heart-warming and soul-stirring to think of the heroic efforts which would be made by rich and poor alike for the benefit of their unfortunate brothers, as has already been proved in the San Francisco earthquake.

But suppose that every year this dreadful state of destitution recurred. And suppose, too, that no adequate effort was made to prevent the tramps and shirkers from entering that district, and, by taking up residence there, sharing in the benefits to be derived from the calamitous conditions.

Would not all the best minds in the country, the greatest economists, the most far-sighted sociologists advise that it would be unwise, unjust, and impossible for the rest of the country to endeavor continually to support the entire population of New England in idleness? Would not the great financiers prove that, if considered as running expense, and not as unusual

improvement, the burden would be too heavy to be borne? Would not the most tenderhearted of our divines question if the parable of the Good Samaritan were applicable to any such far-reaching and persistent condition? Would not the Federal Government appoint a commission to investigate, and if the conditions were the result of some natural disadvantage, would not the whole population be moved? If it were caused by political corruption, would not the evil be obliterated at whatever cost? Or if it were caused by the shiftlessness of the people, would not Congress decide that six million people could not be fed, clothed, and cared for, year after year, even though they were sick and unfortunate? Would not the Government of Great Britain reach the same conclusion should the conditions apply to Canada? 1 Would not Europe declare its inability so to maintain the entire population of Norway and Sweden? 2

No matter how dire the condition, is it not

² Population of Norway and Sweden, 8,000,000. (World Almanac, 1916, p. 328.)

¹ Population of Canada, 7,200,000. (World Almanac, 1916, p. 328.)

reasonable to suppose that out of this great number of people, there would be some one who, though unable to do all that he did before, would still be able to do something? This professor of mathematics at Harvard University, admitting that he can no longer lecture on differential calculus, — is it still impossible for him to count buns in the bake-shop? This bank clerk, who needs rest in the salt air and the sunshine, — is it not possible for him, while getting his rest in salt air and sunshine, still to catch an occasional perch, a tautog, and in time even a bluefish? Is there not one small boy in the whole district to be benefited by the exercise to be derived from driving home the cows? Is there not one psychasthenic girl whose mind can be clarified by making a vegetable garden? Though the lumberman in Androscoggin County is admittedly unable to swing a two-edged axe, can he not still pick up the chips necessary to keep himself warm? Or must we import laborers to pick up chips, and pay for them, and insure them against accident, and pension them; and include in the educational system

of the rest of the country a new course for the scientific education of chip-pickers?

Is it not reasonable to suppose that, out of this great number, many would be found who, though unable to do as much as they did before, or as much as the men in New York or Illinois are obliged to do in order to live, could do a great deal to help toward their own support; and that careful investigation and experiment would disclose that, by some slight change in their surroundings, their occupations, or themselves, they could not only work, but they could also work to their own therapeutic advantage?

15. THE IMMIGRATION PROBLEM

It has been our habit, when faced with any apparent failure in our institutions, to take refuge behind the enormous number of immigrants coming to the United States. Dr. M. Girsdansky 1 has shown reason to question this, at least as regards the growth of insanity.

The United States has declared itself a

¹ Eugenics and Immigration, Jewish Immigration Bulletin, April and May, 1916.

refuge for the poor and oppressed of other lands. But if we cannot care for that alien, and at the same time maintain ourselves and our institutions, the United States as a refuge cannot be considered a success. That our problems are very much complicated by the alien is undeniable. But the alien is so clearly a part of the problem that he cannot be used as an excuse for not solving it.

Our institutional system can no more be excused for failing to keep pace with the alien population than it could be for failing to keep pace with the growth of the native population. We have childishly considered this country as "so big," and its resources as inexhaustible! We have been thrilled with the emotion aroused by the thought of our "land of freedom." We have welcomed the alien to our shores without sufficient consideration of the fact that a large proportion of these aliens arrive, not with the idea of being producers, but with the idea that they can get "something for nothing." (It is fair to admit that many of them have succeeded.)

We have room still for thousands of these

aliens, but only if they can aid in the country's growth. If we are to continue to support thousands of idle men in our cities while thousands of bushels of grain remain unharvested, we can afford these aliens as members only of the producing, and not of the dependent, class.

It makes little difference to society whether a man is a once, thrice, "hyphenated American," or a native citizen. "Is he a shirker?" is the fundamental question.

16. THE FAILURE OF HYGIENE IN INDUSTRY

Just as the past was "priest-ridden," so is our present age "doctor-ridden." The fear of hell-fire has given place to the fear of pain; the ban of excommunication, to the order to go to the hospital.

The doctors have built up a wonderful and superb system. But, unfortunately for its permanence, they have not sufficiently considered the economic impossibility of spending more than a certain percentage of the total production of the country — even for the preservation of life. Just as the priest was obliged

to renounce part of his power in favor of the physician, in order that man's physical needs might be better met, so now must the doctor admit the engineer, in order that those needs shall be met economically. So must the engineer introduce a different quality of instruction, of teachers' service, in order that intelligence shall keep pace with population.

No law can exist without the co-operation of the people. Law fails to enforce hygienic measures in industry because the significance and value of such laws are beyond the comprehension of the ignorant workman. And it is the observance of the law, and not the law itself, which alone can overcome or improve conditions. A law requiring adequate washing facilities in a lead foundry, for instance, the posting of the rules of the State Board of Health, the advice of learned medical societies, the caption "Safety First" upon every wall and door, will all fail to prevent lead poisoning if the workman himself continues to eat his dinner without having washed his hands. If in the hospital we could teach the patient suffering from lead poisoning the necessity for wash-

ing his hands—even if nothing more—we should at least save the cost of bulletin boards, notices ordering him to wash his hands, and evening classes which we expect him to attend when tired and bored—all of which have proved to be failures.

Our whole institutional system does little more than prevent, during the period of incarceration, the act of which the prisoner or the patient has been guilty. It does not teach him not to commit the act again after release. Even in our prisons there are many men who, while to be sure they have heard their charges preferred, do not understand why they are put in prison. They know, indeed, that they have broken a law, but many do not know why the commission of their misdemeanor is an offense against society. If even a small percentage of our institutional population could be released with a clear idea of what their crime against society really has been, and how to avoid a recurrence, there would be an enormous saving of time, money, and energy in many other lines of social endeavor.

17. THE INADEQUACY OF EDUCATION

To all suggestion that this or that particular phase of American life was proving itself to be a failure, the reply, "Education will change that," has been accepted as a sufficient and conclusive argument. At the worst, we have a very remarkable educational system. But, even granting a perfect system, a sufficient number of schools of all grades, perfectly equipped and with perfect instructors, it is unreasonable to expect an improvement in the intelligence of a people if a comparatively large proportion of that people fail to receive the benefits of that education. In other words, no one will get fat on food, however nourishing and well prepared, if he does not eat the food. Some of the weaknesses of the educational system itself are ably pointed out in "Wage-Earning and Education," by R. R. Lutz.1

We cannot expect to increase, or (in view of immigration) even to maintain, the standard of intelligence when, for example, "eighty per cent of those who enter the primary grades

¹ Cleveland Education Survey, Wage-Earning and Education, pp. 30-35.

fail to complete the eighth grade, ninety per cent fail to enter the high school, and ninety-six per cent fail to graduate from the high school. These figures vary but little in most American cities." ¹

"There are in *Massachusetts* twenty-five thousand boys and girls between the ages of fourteen and sixteen years, who are not in school, and are not in a line of work which it would be best for them to follow in life." ²

Very large numbers of our native-born children do not receive sufficient education to guarantee the maintenance of that "intelligent vote" without which the United States cannot preserve intelligent legislation. More than that—our system places before our pupils, at a very impressionable age, a temptation to leave the time-honored trades and to enter commercial and mercantile pursuits. A couple of dollars more a week, clean hands, and better clothes are attractions to many. The result is that in a few years hands meant

¹ Charles F. Perry, Bulletin no. 6, National Society for the Promotion of Industrial Education, p. 6.

² C. H. Morse, Bulletin no. 6, National Society for the Promotion of Industrial Education, p. 86.

for a hammer are displaying neckties over a haberdasher's counter; a body demanding exercise is hopelessly chained to a bookkeeper's desk. The physical body, denied the life for which it was formed, revolts; sickness and despondency result; and the individual realizes too late that he has made a mistake in the selection of his life-work. The surprising growth and success of the correspondence schools prove how many men realize such mistakes.

The trades must inevitably suffer by this deflection of their most promising material, for there is little chance for their improvement if only the lowest order of minds consider them worthy of entering.

That you cannot make a silk purse out of a sow's ear was accepted as a truth generations ago. Yet a vast part of our educational system operates in direct opposition to that maxim. We are educating a very large number of boys apparently upon the assumption that each one, irrespective of his qualities and attributes, may become President of the United States. The success of Abraham Lincoln is more the

cause of poor mechanics in the United States than any weakness in our immigration laws. There is an almost exactly defined limit to the numbers of Presidents which are to be needed in one generation. There is practically no limit to the numbers of skilled workmen needed in almost every walk in industrial life.

Mr. Henry S. Pritchett, in an article on "Industrial and Technical Training" in "Popular Education," says:—

"In every State in the Union there exist schools for this training for the higher industrial life—the life of the engineer, of the chemist, of the manager, of the man who in one way or another is to act as a leader in the industrial army. But, after all, the number of leaders who are needed is limited; and it is worth while asking what is being done in America, and what can be done, for training the sergeants and corporals and privates of the industrial army."

Strenuous endeavors to overcome this weakness have been made through the many grades of manual training, trade and vocational schools, by corporation schools, etc. There are

two fundamental weaknesses in most of these endeavors. First, it is *impossible* for a school to graduate a pupil fitted for commercial conditions. To do that it is necessary for the pupil to be able to work with speed, as under commercial conditions, which is not possible where no commercial conditions exist. Second, many of the pupils in the night, half-time, corporation schools, etc., are already doing sufficient work, and, ambitious to do more, frequently by undertaking too much succeed, not in doing more, but in doing nothing, thus adding again to the dependent class. At the same time society loses the value of their product.¹

Every opportunity and encouragement should be given to the man who desires to improve his condition.

It should be remembered, however, that education is an insurance for the benefit of the

1 "The Technical Night Schools. Only a small proportion of the pupils attend more than one year, and the mortality from term to term is very high, although the tuition-fee plan insures fairly good attendance during the term. The data collected by the survey [Cleveland] indicate that the average length of attendance is approximately two terms—the equivalent in student hours of less than three weeks in the ordinary day school." (R. R. Lutz, Wage-Earning and Education, p. 77.)

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future, and as such necessarily reaps the reward, not of its own efforts (payments), but of those of the previous generations. The value of any change in a regulated educational system cannot be manifested until a sufficient number of classes have not only graduated from school, but have also tried out their learning in actual life. To alter, to any great extent, such an important and elaborate machine as our school system would be a dangerous and questionable proceeding. The period of transition would leave a serious gap which would inevitably be felt in the future.

We have undertaken a heavier insurance than we can afford to pay the premiums on, unless we can get more money out of our present job. For, unlike the individual who finds himself similarly situated, we have no means even of borrowing upon a partly paid-up policy to relieve a temporary stringency. But our position is not one of temporary distress, and even if it were possible to borrow, we should only be adopting the fallacious methods of the South Sea Bubble — that is, paying interest out of gross income.

18. THE COST OF LIVING

No one can blame the twenty-five million wage-earners for complaining at the cost of living. No one can blame them for seeking higher wages and fewer hours of work. However, higher wages, fewer hours of work, and cheaper living do not come out of the capitalist, but out of the producer himself. Less work, more pay, greater security against accident and old age (increased expenditure), can only come with greater production. Greater production can only be obtained either by increasing the number of producers or by increasing their efficiency. In other words, we cannot, with our present strength and skill, in the time allowed, split enough wood — even if we had the wood — to keep the fire burning. We can, to be sure, continue our present system which is very like burning the wood uncut having a forest fire. But is that to be the flaming climax of an "economic age"?

19. WASTE PRODUCTS

In the vicinity of almost every industrial plant a generation ago were heaps ranging in

size from a bushel to a veritable mountain—waste product, scraps, slag, ore without sufficient value to pay for its refining under the methods employed at that time. Fortunes were found in those dumps. Greater incomes were derived from past failures than had been received from the successful product.

Nearly every one of our institutions has a rubbish heap — a dump.

Where do we find society's failures? Waiting in the smoking-room of some mission for a a job which they cannot and will not hold if found; scratching the joints of their prison cells; picking at the sheets in their hospital beds; watching the grass grow in the convalescent homes.

Is it not wise for an economic age to consider if there is not an unearned increment to be gathered also from these dumps?

20. THE VALUES OF THINGS

Everything that is in the physical or the metaphysical worlds is endowed with certain attributes, certain qualities. The value of that thing or idea to society is the value of those

qualities, plus what can be gained by addition or re-arrangement, minus what is lost by such change.

And just as there are different qualities in things, so must there be different qualities in whatever may contain those things. The man who would look in glass vials for potatoes, or in gunny sacks for attar of roses would prove by so doing his inability to grasp essentials. To search through a sack of potatoes on the chance of finding a vial of attar of roses would be an absurdity, unless there was some definite reason for suspecting that one sack of potatoes was unlike all the others. It would be as absurd as the man who starved to death rather than eat his oysters, fearing that one might contain a pearl.

We not only produce John Does by the million, but actually hinder all of them, rather than risk impeding one possible Abraham Lincoln, forgetting that no educational system has ever in itself produced genius, and forgetting also that no educational system — that no difficulty — has ever been able to prevent the progress of the genius —

of that rare individual—who determines at all costs to accomplish some one thing. This is especially true where knowledge is the objective, and, while the solitary, unassisted student may, and often does, kill his body in his efforts to improve his mind, who can say that by so doing he has not fulfilled his destiny? It is seldom that the pedagogue assists such a one without also hindering that individual development which is the true essence of his strength. The unguided student of philosophy, for instance, wastes large amounts of time for lack of direction. Yet it is he, more frequently than the M.A., who continues to think and to study in after-life.

That individual with a congenital determination "to do" should be the last — not the first — one which a system, as such, should endeavor to improve. To prepare the majority for a life for which they are fitted should be the first endeavor of an educational "system." The superior youth will rise superior, or dying will influence the system in exact ratio to his strength. His effort cannot be wasted.

With every gain, even in education, there comes a loss. Any graduate of a high-school course in botany probably knows more botany than did ever any Bohemian gypsy. Yet it would be as unusual now to find even a professor of botany who could read the "signatures" of plants as it would be to find a professor of mathematics who would see any use in the Kokkinon of Eratosthenes, or who would grant to numbers any value other than their numerical value, in spite of the fact that Pythagoras, the Father of Numbers, contended that they were so endowed. For most of us intelligence is a poor substitute for that instinct which leads an animal to pass by a poison to the food best adapted to its condition. Man gets little help from immobile Nature, until, like a fretful child, he hides his tears in her lap and renounces "free will" and reason which differentiate him from a beast.

If my theory is correct, that man is happy only when energizing in the direction of the coincidence of his interests and possibilities, then that country will be happiest where the greatest number of men are energizing in the

direction of their greatest possibilities. And if happiness is a necessary or a desirable factor in the growth and permanence of a nation, then it should be the aim of education so to deal with each individual that that individual, while doing some work necessary for the maintenance and perpetuation of the State, could also be happy and well in doing it.

The educational system of a State cannot be considered a success if it merely forces its pupils on to a citizenship, attempting more than they are mentally and physically capable of, and doomed to insanity and disease. To be a success, the educational system of a State must provide graduates suitable for every situation, high or low, demanded for the continuance of the community—some one so fitted for that work that he can not only do the work, but also do the work, develop under the work, be reasonably happy, and remain well in the performance of it.

21. KILLING TWO BIRDS WITH ONE STONE

The time has come in the United States, and has already passed in Europe, when the

surgeon, especially the orthopedist, cannot be considered as doing his full work by the treatment of injuries or the correction of deformity. His aim should be no longer merely to replace an arm or a leg by a reproduction of the lost member; he should strive to utilize the deformity to its best advantage.

The artificial limb should be regarded as an extension necessary to fill the gap between that part of the man which remains and some useful labor for which he is qualified and which is necessary for his support.

The imitation hand which successfully deceives is only justified in the case of the individual who is purely ornamental, as one might at great expense be justified in having carved from marble the missing arms of the Venus of Milo, but would, as a matter of course, repair with cement an injury to a grotesque fountain. But, without doubt, the so-called "modern society girl" would be better satisfied if her ornamental hand could shuffle cards.

Much Re-Education has until recently been attempted by special gymnasium apparatus.

The exercises and motions producing the same therapeutic effect can be obtained from useful tools and machines and productive occupations. Though it has not yet been proved to my complete satisfaction, it is not too much to assert that there is a useful occupation which will produce a similar effect to that of every drug in materia medica — an exercise and occupation for every joint, muscle, and organ in the human body.

There are the long days, weeks, and months of convalescence during which the patient's condition and improvement depend often so largely upon what?

Medicine? No.

Treatments? No.

Idleness? No.

Food? No.

Upon the assimilation of food, and rest.

Feeding and assimilation of food are two entirely different things. The mere lack of occupation is not "rest." The simplest needs of the convalescent—sleep, rest, and the assimilation of food—cause the medical profession more trouble than almost anything

else, for there are many patients who cannot assimilate food without exercise, who cannot sleep or rest unless their minds are occupied with something "worth while." And what does "worth while" mean to the great majority of patients? It means money!

From the most severe to the most simple conditions of ill health, the needs for money and occupation are almost universal.

"In considering hospital efficiency," say Frank and Lillian Gilbreth, "there are two questions which must be asked: (1) 'What does this factory, called a hospital, manufacture; what is the hospital's aim; and how is it attempting to attain this aim?' (2) 'Are we getting the product as cheaply, as quickly, and in as large quantities as is possible?'

"To consider the hospital in the most general terms, it must be considered as a 'happiness factory.' The hospital is subject to all the laws and processes of obtaining efficiency in the manufacturing establishment. The output of the hospital is 'happiness minutes'; the aim

¹ Gilbreth, Hospital Efficiency from the Standpoint of the Efficiency Expert.

of the hospital is to give the largest number of units of happiness to the most people, with the least expenditure of time, money, and effort, — or, in other words, with the least expenditure of energy possible.

"We must think of this product, happiness, (I) as of the happiness of mankind as a whole — of the social group; (2) as of the individuals comprising the group. The happiness of the social group will be best gained when each individual in the group is happy, and when all are working together for the good of all. In the factory, this condition is called 'hearty co-operation.' It is one of the nine fundamental features of measured, functional management."

If money can be obtained from an occupation which requires for its performance those actions and conditions which are conducive to the improvement of the patient, we shall have killed three and not two birds with one stone. In preventive medicine, if the individual can be educated for, and placed in, a labor by which he shall not only support himself, but keep himself well, we shall have let both

birds kill each other through conflict, and shall have saved not only the stone, but also the effort required to throw it.

22. VOCATIONAL GUIDANCE

It is impossible to determine in what particular work for his later life each youth should be instructed, for youth is seldom sufficiently defined to allow of exact analysis. The high-school student's selection of an optional course, as between zoology and botany, or French and German, for instance, has seldom greater significance than that of his small brother who is filled with the ambition to drive a fire engine.

This is not true, however, of the sick or the dependent, who, through some failure, physical or mental, have proved by actual tests at least some of their possibilities and limitations. These sick and dependent, though their number is legion, can be studied upon a basis of scientific knowledge—that is, knowledge which can be tested and measured; and these can be Re-Educated, no longer upon the basis of childish fancies for optional courses, but

upon what time, experience, and failure have proved to be the mental and physical possibilities and limitations of the individuals; and those individuals can be returned, not only with their fractures, their lesions healed, but fitted for some work needed — required — by the society which has preserved them.

The logical end of a life sustained and prolonged by drugs is death by morphine or cyanide. The time for the lethal chamber has not yet come, and it is necessary for the preservation of society's solvency to find some way by which every particle of good in the rubbish heaps beside our institutions may be utilized.

23. THE NECESSITY FOR GETTING ALL THE VALUE OUT OF A THING WITH THE LEAST HARMFUL EFFECT UPON OTHER THINGS

There is no economy in using a whole man for a work that a part of a man can do as well. If we can train the public, or "persuade the uninjured man that it is hardly respectable to do work that can be done by a cripple," in

¹ Gilbreth, "How to Put the Crippled Soldier on the Pay-Roll," Trained Nurse and Hospital Review, May, 1917.

a short time the well man would feel much as the small boy feels about something that "girls do"; that is, he respects the work itself, but, taking pride in the fact that he is a boy, he cannot be induced to do it himself. There are plenty of occupations for the crippled, for the blind, even for the insane, which, being done by them, will release a stronger worker for some other line of production without interfering with the amount of product.

What does our society need?

I pointed out on page 54, that the trades suffered from the deflection of their most promising material. So far as I know, there is nothing in all our trade-school system which shows youth the true possibilities of the trades. I do not see how the subject could be well included there; but I do see the need — and it can be included — in institutional Re-Education. Our arts and crafts societies are usually pained and shocked at finding among the workmen in the shops so little understanding of the possibilities, the latent beauty and dignity, and the significance of a trade in which (though they have practiced it for many years)

the workmen are only acquainted with the use of the tools involved.

There is no justice in the attitude of society regarding the qualities of the different labors and vocations. The plumber who brings interest and intelligence to his job can find as much satisfaction and opportunity - even opportunity for creative work — in the arrangement of a circulation system as a surgeon does in the performance of a gastro-enterostomy. The two problems are identical in essence. While the surgeon, when performing an abdominal operation, can, by a mistake, more quickly kill his patient, the plumber by a mistake in a drain can just as surely kill an entire household. Why, then, should the surgeon be considered so much superior to the plumber? It is because the surgeon does — and the plumber does not - bring keen interest and intelligence to his work.

Of far greater value to any trade than a new and perfectly equipped trade school would be such instruction as would make the workman realize the true beauty and possibility of his trade. Such a course could not be given as

effectively in an apprentice school as it could be given to a class of a dozen plumbers, for instance, in probably every general hospital in the United States.

24. ORGANIZED LABOR

Life in the United States has tended from many directions toward the qualities of magnitude rather than those of excellence. The rapid growth in our population has not been equaled by our growth in intelligence.

The same condition is true in the world of industry. The labor unions, by urging—even coercing—any individual desiring to work at his trade to join that trade union, have overlooked the fact that, for a just and economical solution of the difficulties of the industrial world, the preservation and upholding of a standard of excellence is as necessary now as it was proved to be in the Middle Ages.

Any discussion of present labor conditions is difficult owing to the fact that there are comparatively few terms which are clearly defined. "Master workman," for instance, implies at

present a certain quality suggesting the employment of others; "journeyman" has little if any well-defined meaning; the term "apprentice" is susceptible of several interpretations. Therefore, for the purpose of this inquiry, I shall use the term "skilled workman" as meaning one thoroughly conversant with his trade — one capable of reasonable thought and care regarding his work, and able to take intelligent independent action, the term "unskilled workman," not in the sense that "unskilled laborer" is now used, but meaning one who, while employed and able to hold his job, is still not thoroughly proficient — one whose judgment cannot be trusted as sound. He may be compared to the boy who, a member of the eighth grade, is still unable to graduate from the grammar school.

Very many workmen in America are unskilled rather than skilled workmen largely owing to this desire on the part of the unions to make every one at work in a trade a member of the union, regardless of his ability.

In every industrial plant there are skilled workmen worth far more than they are being

paid. No one is more willing to grant this fact than are the owners and managers of such plants. But it is economically impossible to pay the skilled workmen their true value when they themselves insist that the unskilled men shall receive as much as they do themselves. And also no one knows better than the skilled workman that the man at the next bench is not a skilled workman, and is not worth as much as he is himself. The understanding of this condition is slowly dawning upon the mind of the skilled workman who, for some generations, has deceived himself, and been deceived, into the belief that the wages paid the unskilled workman in excess of his true value were being paid by the capitalist, instead of coming out of the skilled workman's own pocket. But the skilled workman is already in the minority, and, by having given a union vote to the unskilled workman, has put himself in the position of being unable to gain his own right of individual development.

That an industrial war is inevitable in the United States is the opinion of many sociologists. That war, however, will not be so much

between labor and capital as between the two branches of labor — between the skilled workman who will assert his superiority, and the unskilled workman who, like a leech, will refuse to let go his hold until gorged with blood. With the introduction of the standard of excellence, standards of time and wages can not only be demanded by the unions, but must inevitably be granted by capital. For capital can no more exist without the producer than the producer can develop without capital. To make the skilled out of the unskilled workman is perhaps the very largest of our problems to-day. This cannot be done with youth, because youth has not yet defined himself. It can be done only after the workman has proved that his education and experience have still left him unskilled. Industrial conditions would inevitably shift and change, until the skilled workman, who is absolutely necessary for the continuance of an industrial nation, had found his true status in that industrial life. For he would then be in a position to demand that it should be so, and the mere secession of his labor, and the consequent stopping of his pro-

duct, would without violence give him powers of which even Sam Parks never dreamed.

25. LIGHTENING THE PRODUCER'S BURDEN

The cost of maintaining the Government, the necessity for armies and navies, etc., have no direct bearing upon this inquiry. But the enormous capital locked up both in state institutions and in privately endowed efforts, and the enormous amounts of time and energy wasted in them are the principal tenets of this inquiry.

There is a feature to the many huge and generous benefactions which commonly escapes consideration. It should be remembered that no so-called "rich man" — that no capital — can "endow" an institution, as the term is ordinarily understood, — that is, paying its expenses forever. The "rich man" can, indeed, set aside a proportion of his capital to be devoted to a specific purpose. But the annual interest necessary for the support and maintenance of that "endowed" institution must be paid by the product necessary to provide that interest. Consequently, it makes

little difference to the producer whether an institution is "endowed" or not. If this capital could be released, or if it could be made to work (to pay interest), the burden upon the producer would be very considerably lightened.

26. THE WEAKNESS OF PRISON LABOR

But Re-Education at once raises the objection—and with some justice—that such an effort has already been made in the prisons; and, while successful in so far as the beneficial effects of work upon the inmate and the value of his product are concerned, changes were produced in other walks of life so serious as to demonstrate its danger.

The evil of convict labor has been proved by actual experience to lie not in the fact that the convict is made to work. Almost all prison authorities declare, on the contrary, that work is beneficial. Neither does the evil lie in the fact that there is a product. The only evil lies in the present method of bringing the product of convict labor into competition with the similar product of the normal workman. Not only has this method proved unsuccessful, but

it is economically false because such a method in effect is taxing the normal workman (by making him support the prison) in order to subsidize a rival — an absurdity.

But if such competition can be eliminated, and if a market for the product of dependents can be found wherein no such competition exists, the only evil of convict (institutional) labor is eliminated.

27. A BUSINESS OPPORTUNITY

It has heretofore been assumed that there was no such possibility—no such market. Several States have made a slight advance toward the solution of this problem by endeavoring to use the product of the prison shops in the other departments of the State. For instance, school desks could be made in the prisons and used in the schools maintained by the State.

Theoretically this method should be successful. But practically it has not been proved adequate on account of the fact that almost all state commissions and departments are working alone and independent of all the other

state institutions. For instance, a state commission on education (being human) aims simply and solely to solve its own problems, and to preserve to the utmost its own individuality. The state commission on prisons is in exactly the same condition. There is no correlation between the different branches of the state institutions; and this allows so many opportunities for disagreement, for distrust, and even for dishonesty, that without some central agent, some clearing-house, some governor (in a mechanical sense, a regulator, not a dictator), there is little chance for any development along this line. But that a gigantic market for such products does exist will be shown shortly.

Should a business man be offered a business opportunity to introduce an enterprise for which was required little capital, slight increase in overhead expense, free or very cheap labor, waste or very cheap material, no advertising, slight charge for transportation either of raw material or of finished product, and a constant and assured market which would pay good interest, almost his only

objection would be that such a business could not be honest. There are some ten thousand such opportunities in the United States to-day.

28. A HALF-TIME COMMUNITY

In the picture of a devastated New England I gave a true and comprehensive idea of what the condition of our dependent life really is.

Looking at our institutions as a whole, — I mean all dealing with sin, sickness, insanity, and delinquency, — we find almost every phase of human life represented. It is safe to say that there is no trade — no profession — unrepresented in this great dependent population, the individuals in which for some reason or other have proved themselves to be unable to meet the requirements of the normal life of this age. That is one, if not the only, factor common to all the equations (different institutions).

Can not this common factor be taken as a basis upon which to build a new line of endeavor which shall not add to the weight of an already overburdened society, but which, by virtue of its quality, may be used to co-

ordinate all the institutions, while still leaving each a separate entity, to bind them together with some common purpose—the common purpose of mutual support?

There is no reason why the drunkard in a dipsomaniacs' home cannot work to his own advantage by growing vegetables. Indeed, in many States, he has already been made to do so. There is no reason why he should not be made to grow more vegetables than he himself can consume, and, if he is able, he should be forced to do so without being subsidized by society beyond the point necessitated by his weakness. There is no injustice in having such excess products sent across the street, or across the State, to another institution wherein his own illegitimate children are also being supported by the same taxpayer. There is no reason why the little girl in the "orphans'" home, in return for the potatoes received from her unknown father, should not be taught to knit him a pair of mittens, or a pair of stockings, instead of living for nothing at the expense of that same taxpayer. Admitting that the morals of a woman in the "nasty ward"

are beneath contempt, if she can sew buttons on the overalls of the unknown man who caused her downfall, is it unreasonable or unjust? Cannot the architect who is convalescing from an accident assist in the erection of a poultry-house, and not only be helped to health, but have his self-respect maintained? Even the tuberculous, for whom absolute immobility has been for so long considered essential (in exactly the same way that past generations considered it necessary to keep them away from, and not in, fresh air), have been proved to be benefited by work, especially garden work; and not only to be benefited, but to leave to the sanitarium an extra dividend — an unearned increment — in the form of beautiful gardens, useful roads and drains, or improved farmland. Many cases where such work is being done both by individuals and by groups can be already cited.

By bringing all these efforts in line, by exchanging the possible product of one institution, in excess of its own needs, for the different product of another institution, in excess of its own needs, and by sending these articles

(or accounts) through a clearing-house, our whole dependent population, with all its sub-divisions, could, while leaving each institution independent so far as its particular effort was concerned, decrease very materially the cost of maintaining them all.

29. PERIODS OF INDUSTRIAL DEPRESSION

Standardized courses of instruction, and a fixed standard of excellence for products, if introduced into the Re-Educational schools and shops, would also be of enormous assistance during periods of industrial depression.

Institutional life, though it changes amazingly from generation to generation, still has always to do with the fundamentals of human life and care, the essentials of which change but little. Consequently, a standard set for one article to be used in the institutional half-time community could be maintained with but slight, if any, change for a long period; and a man, once having received sufficient training to enable him to meet that standard, would be able to produce that article in case of need a long time after his actual institutional life

ended. This has a wide bearing upon the grave question of what to do with and for convalescents after their necessary discharge from the hospital, but before they are strong enough to return to normal full-time life.

Let us suppose that a sick man, during his early convalescence in the hospital, has learned to make scrub-brushes, or bushel baskets, or doormats, or hospital slippers, etc. — that he has been making them for a sufficient time in the hospital workroom to be able to deliver his product up to standard. He knows how to do the work, and he knows how well it must be done in order for him to secure compensation for it. If the hospital provides the patient, upon discharge, with the educational training, and adds thereto raw material, that patient can at home produce useful articles up to standard, at a price attractive to the State. At any time later, in case of poverty or distress, the man will still have a trade and a sure market. For the State could afford to buy and to store the completed article (if up to standard), and the capital necessary would be far less than that required for our present so-

called "charity," with the additional advantage that the man has not been pauperized, and that the State has something to show for its money.

The influence of such a work upon the normal trade would be only to eliminate such sales as that trade itself makes to the institutions.

It would be obviously unjust for the State, after accumulating a large stock of products, to put them upon the open market in competition with the normal trade. But it could, with justice and without serious interference, exchange those products for the products of the institutions of other States, or sell them in foreign countries.

Developed, this method could also be used with advantage in times of industrial depression for the unemployed, who, by always being able to get a job in the institutional shops, could receive enough to live upon and a very slight addition, and consequently need never be hungry, unless he preferred being hungry to working. And if it seems cruel to the charitably disposed mind to let a man go

hungry under any circumstances, it should be borne in mind that St. Paul said, "And if any would not work, neither should he eat";1 that Adam was told that by the sweat of his face he should earn his bread; and that, according to the Commandment, it is six times more important to work than to keep the Sabbath. The vagabond would no longer find it necessary to attract the roundsman's attention by throwing a brick through the window of some respectable taxpayer; for, by declaring himself dependent at any police station, he could be sent to that shop where he was best fitted to work, and where, by his own efforts, he could be fed and lodged until his little earnings had amounted to enough to give him a fresh start.

That this would undoubtedly result in a very large number who, once entering such a shop, would never leave it, is unquestionably true. The essential question, however, is as to whether such individuals would not have reached their proper level—whether they would not be better and more useful citizens

¹ 2 Thessalonians, III, 10.

there than as vagrants in the country or as loafers in the city.

30. THE THIRTEENTH AMENDMENT

It will be objected that the Thirteenth Amendment of the Constitution of the United States provides: "Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction."

As, however, the degree of crime is not specified, and, as I have been assured by high authority a misdemeanor is a crime, were the laws really enforced it would be difficult for any citizen in some States to exist for a day without being convicted of crime. It is safe to assert that there are few individuals in the country who could not be forced to work, the Thirteenth Amendment notwithstanding. The vagrant, the drunkard, the individual who fails to give truthful information regarding contagious diseases, are already considered as committing misdemeanors by the law. And perhaps were it made a misdemeanor

to give birth to a feeble-minded or a syphilitic child, a greater effect would reward the efforts of society than by all the existing methods of eugenics and purity. At all events, the man who expectorates in a public conveyance, or, in some States, upon a sidewalk, can be made under the law to work.

31. PROFITS FROM INSTITUTIONS ALREADY PROVED POSSIBLE 1

That enough has already been accomplished to justify the belief that the theory of a half-time colony is tenable, I shall now endeavor to show.

The superb work which has been done in the last three generations for the re-education and self-support of the blind is too generally known to demand special notice.

The work for the insane, though less clearly understood by the business man, is no less satisfactory or spectacular. In the Sixty-second Annual Report of the Trustees of the Taunton (Massachusetts) State Hospital, for

¹ Reference in this chapter, to foreign institutions, relates to the period since the beginning of the present war.

the year ending November 30, 1915, the Superintendent, Dr. Arthur V. Goss, makes the following statement:—

"Thirteen hundred and eighty-seven patients, -- six hundred and forty-eight men and seven hundred and thirty-nine women, - or 75.95 per cent of the whole number under treatment, engaged in some form or forms of employment. Two new industries have been introduced during the year — picture-framing and paper-bag making - while others are planned for the coming year. Last December we held our annual Christmas exhibition and sale of articles made during the year, the total receipts of which were \$477.37. May 1, 1915, an exhibition and sale room was opened at the hospital that has proved to be a great help and convenience, as it enables us to show our handicraft work to persons interested and tends to promote a steady sale. From the diversional occupation exhibit, held under the auspices of the American Medico-Psychological Association at Old Point Comfort last May, we were awarded three first prize certificates. This last summer at the William C. Lovering

colony nine patients undertook to cultivate individual gardens, a small garden plot being set aside for each. These gardens were all successes in a practical way, while the necessary labor and care was a wholesome diversion to those who undertook the work. Mention should here be made of the war relief work done during the past year by our patients. Besides the regular hospital industries which have been kept fully up to standard, our patients have made 2054 articles exclusive of surgical dressings — of which many more have been made — for the relief of war sufferers in Europe. This work has been to many, if not to most, a labor of love. Information in detail concerning our industrial work will be found in the various tables accompanying this report, to which reference is made. Although we have devoted more time and energy to diversional occupations than in previous years, we have endeavored not to depart in the least degree from the fundamental principles upon which our industrial system is founded and by which it has been developed, one being that the most time and

energy should be expended on those forms of industry that are the most directly useful regarding the hospital as a co-operative community. It is our conviction that it is necessary to give this principle due prominence to establish a permanent and valuable industrial system; this will also tend to counteract the tendency to develop an unhealthy spirit of rivalry, whereby greater efforts may be made to surpass a sister institution than to promote healthful and helpful industry according to the needs of the individual patient."

The actual product of this endeavor is here given. Similar reports are made by the super-

¹ Summary of Products from Taunton State Hospital from December 1, 1914, to November 30, 1915:—

Farm produce — 244,483 quarts milk		\$13,854.04
8,818 dozen eggs		2,189.27
50,859 pounds meat		5,317.59
1,335,432 pounds feed, etc		6,339.90
779 boxes vegetables		1,336.73
7,441 bushels vegetables		5,186.99
89,462 pounds vegetables		623.30
43 barrels vegetables		58.70
7,142 quarts vegetables	· • •	665.68
Total		\$35,572,20

intendents of almost all state hospitals for the insane in Massachusetts.

In many conversations and discussions incident upon the formation of Consolation House, I was told by noted doctors and surgeons that, while such results might be expected from the insane, — those suffering from mental diseases or from disturbances of the special senses, — they would not be possible from medical or surgical cases. In other words, that what was possible with the deaf, dumb, blind, or insane would not be proved possible for the inmates of the general hospital. The European War has already proved that assertion to be incorrect regarding surgical cases.

"Hostilities were declared on August 1, 1914, and on the 13th of the same month the

^{29,804} pieces, work done on wards (sheets, pillow-slips, etc.)

^{3,310} pieces, work done in mattress-shop.

^{15,847} pieces, work done in tailor-shop.

^{2,652} pieces, work done in broom-shop.

¹⁹⁷ pieces, work done in basket-shop.

^{1,656} pieces, work done in chair-shop.

^{4,757} pairs, work done in shoe-shop.

Empress addressed to the president of the German Association for the Care of Cripples (Deutsche Vereinigung für Krüppelfürsorge) the following communication:—

"Her Majesty, the Empress and Queen, expresses the wish that the activity of the German organizations for the care of cripples should not be hampered by the events of the war, but that they should, on the contrary, contribute their share toward the alleviation of present hardships. We should strive to prevent diminution in the scope of work by institutions for cripple care, and must aid them to extend that work in certain directions. For instance, needy children, who are not at present being cared for, should be received into the institutions in order to relieve their mothers of undue burden.

"'It also seems desirable that these institutions should undertake the orthopædic care of the wounded, as their entire equipment fits them for such work. Their facilities could also be utilized to

restore the wounded to their former industrial or professional status....'1

"Beginning the middle of last December, there was held in the Reichstag, Berlin, a general exhibit dealing with the care of the wounded — the Ausstellung für Verwundeten und Krankenfürsorge — in which there was an important section dealing with provision for war cripples. There was exhibited orthopædic apparatus, and articles and pictures showing what badly crippled individuals can do. This exhibit was later sent to other cities. In connection with it there was held in Berlin on January 13, 1915, a great meeting to discuss 'Kriegskrüppelfürsorge.' Dr. Biesalski spoke on the principles of the work. Professor Schweining described the arrangements perfected by the army authorities. 'The military authorities not only seek to heal but also aim to apply measures to avoid the unfavorable results of wounds; arrangements for this had already been provided in time of peace. In part special sections for orthopædic work were

¹ Douglas C. McMurtrie, Provision for War Cripples in Germany, Bulletin, Military Hospitals Commission of Canada, April, 1916, p. 93.

established or contracts were concluded with private institutions. A large number of orthopædists have been secured as consultants for numerous hospitals. For instance, in connection with the Garde-Korps, twenty-four medico-mechanical institutions are at the service of the military authorities. Also, arrangements have been completed with one hundred and seven health resorts for the after-treatment of the wounded and sick. Artificial limbs and apparatus are procured and renewed by the military authorities. Special institutions have been established for the one-armed and the blind, and others will follow. Advisors with reference to trades are attached to the hospitals for those who no longer can follow their previous trades or think they cannot. Finally, he spoke of the special pensions, as the field allowance and the increase of pay for mutilation will remain as permanent compensation for those crippled in the war.' Kirchner, the Ministerial Director, also spoke of the general co-operation requisite for success along this line." 1

¹ Douglas C. McMurtrie, Provision for War Cripples in

In a letter urging the removal of Consolation House from America to France or to Switzerland, a professor of a once flourishing university exclaims: "You preachers of the need of the Re-Education of dependents are wasting your time in America where you have to spend a whole day in the endeavor to get the president of a college to admit a premise which is self-evident to every shopkeeper in Europe. No one here can look out of his window without seeing a dozen maimed men; he knows that his sons, his nephews, and his brothers are in the same condition, that he must help them, and that at any moment his own house may fall. He throws his arms up to heaven and cries in anguish, 'My God, I am willing, but how can I support them all?"

This apparently simple, though pathetic, statement in reality manifests the weakness of the present system. There is necessarily a limit to the amount which the normal man can do for his unfortunate brother. There is necessarily a limit to the number of members of a

Germany, Bulletin, Military Hospitals Commission of Canada, April, 1916, p. 97.

community who can remain in idleness, no matter how distressing their condition. More than that—to support in idleness, even though in distress or pain, if not the worst, is not the best means of assisting the unfortunate.

In the report of the Commissioner of the Military Hospitals Commission of Canada, Mr. W. M. Dobell, is the following note on convalescent homes:—

"I. Convalescent Homes: — There is an absolute unanimity of opinion that the influence of convalescent homes is bad; the life in these institutions is conducive to lax discipline and idleness; men are shown a different standard of living from what they have been accustomed to, and one which they will probably not be able to maintain. This naturally produces unrest and dissatisfaction. The aim should be to keep men in military hospitals under military discipline until they have thoroughly recovered from their wounds, and then either return them to their homes, or when required, induce them to take vocational training with a view to making them capable of supplement-

ing their pensions." 1 That this is possible has already been clearly shown.2

An inquiry carried on by the author some two years ago among the managers of large wood-working factories showed that in their opinion, based upon experiences of twenty-five years or more (there were no figures from which exact deductions could be drawn), only one third of one per cent of those meeting with serious accident were actually unable to go back to their work if they had a genuine desire to do so.

⁶ 1 Bulletin, Military Hospitals Commission of Canada,

April, 1916, p. 26.

2 "But while the work has been primarily curative for mind and body, a great many men have found the training received during convalescence to be of actual commercial value in after life. Already numerous instances of this have occurred, the following being a typical example of the help which can be given in this way. It is well known that a little skill in mechanical drawing, the ability to read and interpret a blue print, and a knowledge of simple shop arithmetic or mathematics, will enable the ordinary craftsman, in most cases, to become a foreman or superintendent. These things can be, and are being, imparted to men in our hospitals, and cases have already occurred in which men have returned to civil life and taken better positions than they held before enlistment, in consequence of the training given them during convalescence." (Bulletin no. 3, Military Hospitals Commission of Canada, December, 1916, p. 3.)

Dr. Bourillon, of the Hospital at St. Maurice, states "that he had interviewed two thousand men in order to get three hundred and fifty students, and that his chief enemies were alcoholism and a certain ingrained idea that, as the men had been wounded in defense of the State, the State should support them for the rest of their lives."

Indeed, so thoroughly have our so-called charitable impulses undermined the self-respect of the people that a new medical term has been introduced in Europe to cover those cases who, through fear of not being supported for nothing, refuse to endeavor to return to work. This condition is known as "pension hysteria."

The Superintendent of the Fédération Nationale des Mutilés de la Guerre states that "the percentage of men willing to learn trades is practically the same as that given by Dr. Bourillon. They interviewed three thousand men in order to get five hundred so that in each case the percentage works out to about seventeen per cent." ²

¹ Bulletin, Military Hospitals Commission of Canada, April, 1916, p. 15.
² Ibid.

"With reference to the percentage of men who are willing to take vocational training, it is well to remember that in addition to these—who amount to about seventeen per cent—there are probably about twenty-five per cent who are enabled to get employment without any training, either by returning to their old occupations, or by taking positions as concierge, garde-chasse, watchman, elevatorman, etc.

"This therefore leaves fifty per cent to fifty-five per cent of injured men who are apparently not trying to do anything. This percentage will, I feel sure, be reduced as the men become more assured that their pensions will not be reduced in proportion to their earning capacity." 1

And Dr. Amar, Director of the Laboratoire des Recherches sur le Travail Professionnel, in Paris, estimates that "eighty per cent of men apparently incapacitated, can be made competent workmen and very few come under the heading of 'totally incapacitated.'"²

¹ Bulletin, Military Hospitals Commission of Canada, April, 1916, p. 17.

² Ibid.

Thus, one of the greatest objections which the crippled soldier has to learning his trade is the fear that it may decrease his pension. In other words, he would prefer being supported by some one else to supporting himself, and in many cases, he endeavors to use his wounds as an excuse for idleness for the rest of his life. Unfortunately for the achievement of this desire, the number of unmaimed men is no longer sufficient to carry such a burden.

- But war is not the only condition which causes wounds, disability, and death. The average annual number of serious industrial accidents and deaths is great enough to be compared with the figure of those injured and killed in the first year of the war.

We preachers of the need of the Re-Education of dependents are frequently jeered at by superintendents of institutions for being so "innocent" and "ignorant" as to believe that the sick man, the pauper, or the prisoner could be induced to work. But the personal experience of those who have sincerely endeavored to induce those dependents to work proves those jeers to be without foundation.

Any one, sick or well, but especially if sick, resents the idea of having to do something which he does not want to do. In the work of Re-Education, the subject of study must not only be specially selected, but it must be presented to the student (the patient) with at least as much consideration as one would give to a request for service from a small boy or a parlor maid.

In the State Hospital for the Insane at Taunton, Massachusetts, "before the end of ten days"—after admission—"fifty per cent of the men patients and seventy-five per cent of the women patients are employed at some useful occupation." 1

As to similar work with the lowest type of mind, that with the most highly pronounced desires for idleness, experience with some of the inmates on Blackwell's Island shows most clearly what can be accomplished by intelligent instruction.

Almost equally sensational, and no less valuable than the work of the American sur-

¹ Reba Cameron, "Industries and Amusements," in Trained Nurse and Hospital Review, August, 1914, p. 69.

geon has been that of an American engineer,¹ whose invention,Autostereochronocyclegraphology and the Simultaneous Cycle Motion Charts, has made it possible for even a worker not highly trained to determine instantly the adaptability of a wounded man, with a given disability, to a certain vocation.²

But war has not produced this need. It has only emphasized it. At a Conference on Occupations for Invalids and Dependents, held under the auspices of the New York City Visiting Committee, January 17, 1916, Mr. Wright, Deputy Commissioner of Charities, made the following statement regarding the inmates of Blackwell's Island:—

"Eight years ago the Committee made a beginning by sending a teacher to the almshouse on Blackwell's Island; but it was only a beginning. The Board of Estimate then had an examination made of almshouse inmates and convalescents, particularly considering the question of convalescent occupation. Later a man was sent to the large almshouses

¹ Frank B. Gilbreth.

² See Barton, Occupational Therapy, p. 88.

all over the United States to study the question but he was not able to find much light on the subject. It was found that while a number of occupations were taught, no effort was made to employ any but the most vigorous inmates. Fifty percentage were not occupied.

"The medical expert of the committee then examined the almshouse patients very carefully in detail and classified them as to the kind of work they were fitted for. It was determined that sixty percentage could work in various ways, not including the forty percentage bedridden or crippled patients who could be taught occupations suitable to their limitations. There was also a fair consensus of opinion that at least in our municipal hospitals the patients could be employed about fifty percentage of the time of their stay. The average time is twenty days, and if each patient were employed half that time in some light work it would be equivalent to half the patients working every day. In one hospital of one thousand patients working only one hour a day it would mean five hundred hours of work a day. The problem as far as it applies to the Depart-

ment of Public Charities includes the sixty percentage almshouse inmates and the hospital patients; approximately the occupation of six thousand people." ¹

It is generally admitted to-day in Europe not only that all the wounded should be occupied, but that to their own advantage Re-Education should be begun at the earliest possible moment. That the therapeutic value of such Re-Education, exercise, and occupation is assured, is proved from the fact that in one hospital in Europe a director of physical training made the assertion that "a graded system of exercises under medical supervision resulted in raising the percentage of men who returned to active service from the hospital from eighteen to seventy-nine per cent."2 While it may be objected that "physical exercise" can hardly be called occupation, it would in many cases be the prelude to occupation.

That the inmates of our institutions can be

¹ Maryland Psychiatric Quarterly, October, 1916, p. 39.

² It would appear that this officer has based his percentage on some remarkable results obtained in one hospital.

used to their own advantage, and to the advantage of the State, is nowhere better proved than in the prison at Stillwater, Minnesota, wherein from 1900 to 1916 the growth from the industries has far more than doubled, so that now the earnings are about three times the amount of the expenses — and that after remunerating the prisoner for his work.¹

In the Report of Mr. Bernhardt Jacob, Superintendent of the Detroit House of Correction, for 1915 (pages 5-6), is the following:—

"Twenty-six hundred, or sixty-three per cent, of those received were committed for periods of thirty days and less, and thirty-six hundred and ninety-four, or ninety per cent, for periods of ninety days and less. ... The Night School, as heretofore, continues doing splendid work and the results obtained are very gratifying. ... After the payment of \$14,704.55 to the prisoners under our co-operative system, and \$3109.87 for repairs and final payments on the new dormi-

¹ Net gain, excess of earnings over expenses, \$593,797.07. (Minnesota State Prison Biennial Report, 1915-16.)

tory building, there remains a net profit from the year's operations of \$46,086.94."

Mr. John F. Leonard, Warden of the Maryland Penitentiary, at Baltimore, in a paper read at the Annual Congress of the American Prison Association, Buffalo, October, 1916, said:—

"Realizing that many men come to the prison because of ignorance, —and this is especially true of the colored race, which furnishes two thirds of the population of the Maryland Penitentiary, — it is evident, if prisoners are to be returned to society in an improved state, this condition must be overcome. They must not leave as they entered, and yet this condition existed for over one hundred years. Now we have what is recognized as one of the most successful prison schools in the country. This consists of night classes, - one hundred and ninety men and women - correspondence classes, and a class in sign writing, all of which are doing good, constructive work. The teachers are all inmates, and we much prefer such because an outside influence is always a disturbing influence. I do not need to go into

further details; suffice it to say that illiteracy has been banished from the Maryland Penitentiary.

"Not all the work done in the prison fits men for best results outside, but much of it does, and many men are able to use to advantage the training they have received in the prison. . . . For very many reasons useful labor is essential to character-building, and especially so in prison. No man is going to work willingly merely for the sake of working; there must be some end in view, -- something to be accomplished, - and to get the best results the man must be interested in the result of his work. He must have a personal share in the profit. Even the satisfaction of knowing he is selfsupporting is not sufficient; there must be the possibility of some personal gain. In the Marvland Penitentiary every man is at work, is working under conditions as near normal as it is possible to make them, and is working with the prospect and possibility of receiving a share of the profit from his work. Unless there should be an unexpected decrease in our population we confidently expect the prisoners

to earn for themselves next year not less than \$50,000."1

The reports of the Maryland Penitentiary cannot be too carefully studied by any one who has the welfare of humanity or of the State at heart.

The school at the Stillwater, Minnesota, Prison 2 shows the following gratifying results:

Comparative School Attendance Record for Year ending July 31, 1916

School Term, 1915-1916 September 15, 1915, to May 12, 1916

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	Мау	To- tal
Sessions	7	13	13	12	12	12	14	11	6	100
Attendance at opening session	214	214	211 210	178 178	179	180		178	169 167	214 187
Average compulsory attend- aoce	5	5	5	5	5	5	5	3	5	5
Average voluntary attend- ance Excused by physician tem-	207	168	163	146	146	145	141	140	136	171
porarily	1	9	12	29	4	10	7	11	5	88
maneutly Enrolled during month	2	2 8	1 1	12	1 8	5	14	0	0	11 58
Reported for breach of rules Reported for indolence and lack of interest in school	ī	3	2	0	2	2	2	ō	ő	12
work	0	٥	1	٥	٥	٥	0	۰	٥	1
sory attendance	٥	42	42	27	27	27	30	27	26	27

¹ John F. Leonard, Experiences in Prison Administration.

² Nineteenth Biennial Report, 1915-16, Minnesota State Prison, p. 31.

32. AN INDICATION OF THE METHODS OF RE-EDUCATION

I have endeavored to indicate that society is greatly in need of two things—an increased number of producers and an increase in their efficiency. An increase in efficiency must begin in many, if not in most, cases with the stimulation of the desire to become more efficient. At no period in the life of a man is his mind more receptive to new ideas (provided they are properly presented) than during convalescence; and the same is true in many instances of dependent life.

"When the moon is bright and the snow is on the ground, we expect a small boy, who has been running errands all day, to put away his sled and, in a hot, stuffy room, to study arithmetic or bookkeeping. When the same boy is in the hospital with a compound fracture, we think that we are doing all that is necessary if we send him a copy of an old magazine. In the first instance, his endeavor to locate a mistake of two perfectly imaginary pennies is conflicting with his recollection of the most fascinating of 'belly bumps' at the bottom of the

hill. In the second instance, he is yearning for anything that will help him pass away the dreary hours. That is a condition of mind of which the trained educator can take advantage and, even if it increases the labor of the hospital, it is possible by introducing such work there to make a saving in another line of social endeavor." 1

"In Re-Education, as in education, the primary aim in the selection of subjects is to meet fundamental needs in such a way that those fundamentals may be the common starting-point for a large number of widely diverse secondary courses," — as arithmetic is necessary to the shopkeeper and the chemist as well as the mathematician.

"The 'three R's' of Re-Education have rapidly proved themselves to be drawing, modeling, and mechanics.

"It is as impossible for a man to go far in advanced industrial life without a knowledge of drawing (the universal language of labor) as it would be for one to go far in literature without being able to read and write.

¹ Barton, Occupational Therapy, pp. 41, 42.

"Not only has it been necessary to invent new methods for teaching these subjects, but it has been necessary to invent new methods for teaching the same subject to patients with different diseases and disabilities. Beneficial therepeutic effects should always be the first consideration.

"Some of these subjects are proving to be surprisingly dangerous; for instance, paperfolding, one of the oldest of the old-time 'amusements for invalids,' may produce serious results when handled according to modern methods. The small boy can easily become hysterical upon discovering that he has made a 'doggy with a tail that really wags'; and if in the endeavor to interest a professor of mathematics who is too weak to do anything requiring more energy, I discover (apparently by accident) that the paper I have folded proves that in a right-angled triangle the square of the hypothenuse equals the sum of the square of the other two sides, I not only 'interest' him, but by suggesting that it may also be possible in the same manner to prove 'the spiral of Archimedes,' I may produce an

effect equivalent to a hypodermic of strychnia. Any physician should see the possibilities of that, especially if stimulants were to be avoided. The same effect would not be produced upon the small boy, who, not understanding the significance of what has been done, would not be interested in the deduction so fascinating to the trained mind; yet the paper dog may be used to lead the boy on to the study of geometry in exactly the same way that malted milk may be the beginning of a treatment involving generous doses of iron which, at first, the patient would not be able to assimilate. Thus, paper-folding may be used as a powerful stimulant, a mild tonic, or a hypnotic, according to the method of administration.1"

Without explanation, it is difficult to see how many of the most important trades could be taught to sick people. Millinery, with its fascinating bits of ribbon, feathers, and flowers, is obviously a trade which many could do in bed. But certainly one could not expect to find many very sick people who could study carpentry, who could handle sills of four by

¹ Barton, Occupational Therapy, pp. 39-41.

eight hard pine, or put up a ridge. But joinery can be taught on a whittling-tray in bed, at a quarter or a three-quarter-inch scale, or out of half-inch soft pine. And, while this would provide no practical work with carpenters' tools, that work would and should come later. We do not fail to teach the boy his numbers, even if some years must elapse before he reaches the pons asinorum.

At first the product is no greater — but no less — than is the blank book in which we scribbled our first "pot-hooks and hangers"; and, while a patient must be almost well before he can undertake actual structural carpentry, there is a wide field in the making of furniture, for instance; or, to suggest a direct secondary course to "joinery in bed," the making of children's play-houses, doll-houses, bird-houses, garden- and summer-houses, etc., which, while introducing many of the problems of joinery and construction, would, because they are so much smaller than a dwelling, be of shorter and lighter stock, would be possible for the convalescent, and would leave a product of commercial value.

It seems highly improbable that there would be found in any hospital the "makings of a gang" for a Bessemer converter, an openhearth furnace, or any foundry; but it is by no means improbable that there are many in every large hospital who could be helped and benefited by pattern-making, by moulding, by the casting of plaster, cement, or pewter — all resulting in products of value.

It would be absurd to suggest now a course for the practical training of locomotive engineers. But with a tin can, a knitting-needle, and an alcohol lamp, a patient can (in bed) assemble and run a steam turbine (Hero's engine) of sufficient power to turn pulleys of spools with belts of string, and thus learn much about the transference and the transformation of motion. Such a "bed-tray" would probably surprise, delight, and amuse an experienced locomotive engineer quite as much as it would a small boy, and would with both provoke interest, thought, and experimentation. This treatment might well be used both in the case of the small boy and in that of the engineer, should each show indications

of mechanical genius or keen interest; and it could be taught to both (like arithmetic), though its after-effects in subsequent training might be quite different.

33. WHAT SOME INDIVIDUALS HAVE ALREADY ACCOMPLISHED

Pain, disability, and distress have quite different effects upon different individuals. Though the majority of human beings are inclined to give up—to "lie down"—when sick or in trouble, there are many upon whom pain and distress have the opposite effect—who are inspired not to do less, but to do more, by their discomfort or disability. Certainly not all sick or discouraged men can be made to see the "sporting possibilities" of their affliction; but so many have done so that it seems safe to assume that many more can do so than are now prompted so to do. The first endeavor, then, in the Re-Education of dependents is to make the individual desire to learn.

"The teaching element is more important in this new phase of adequate placement than it has ever been before, because in every case a

new or changed worker must be made useful, self-supporting and interested. That he become and remain interested implies the highest form of teaching and of learning." 1

Sufficient laboratory experiment has already been made during the past three years at Consolation House and in allied institutions to convince me that such a stimulation of interest and desire is possible with a very considerable proportion of dependents. And, if we admit the unit, we must admit the possibility of multiplication. What is possible with one, while perhaps not possible for all, must nevertheless be possible for more than one.

Some of the triumphs over disability are too encouraging not to be noted. For instance, the one-legged French blacksmith who, by putting a hook in his peg-leg, and that through a ringbolt in the floor, made his disability increase his efficiency by making a more useful leg for his work than Nature had provided. Another, who through the loss of his forearm learned to

¹ Gilbreth, "Motion Study for the Crippled Soldier," Journal of the American Society of Mechanical Engineers, December, 1915, p. 671.

use his stump in such a way as to dispense with a costly machine. John C---, who was so completely paralyzed as to have movement only in his eyes and tongue, developed his interest sufficiently to learn to draw with his tongue well enough to illustrate a book on birds published by the British Government. Beatrice C-, who, though dumb, turned her affliction into the nimbus of a saint by devoting her life to the teaching of others, who, though also dumb, had had fewer advantages than she herself. Tack A—, who, managing to live in spite of a broken neck, turned his disability into "press-agent stuff," using his own distorted body as an advertisement with which to sell accident insurance. Edward P-, blinded and deprived of the use of his right arm in an explosion, by a few weeks' tuition changed himself from a vender of newspapers to a self-supporting manufacturer of knitted thermos-bottle holders, with a market extending all over the country. And a oneeyed, one-armed, deaf, legless man who supported himself profitably by dental nursing. Or even the author who, during the ten or twelve

years of hospital and convalescent life necessary for the overcoming of four attacks of tuberculosis, four surgical operations, including an exploratory laparotomy and an amputation, morphinism, hysteria, gangrene, and paralysis, has studied the relation of the sick man to society, and who now offers this little book as one of the results of his disability.

THE END

The Riverside Press CAMBRIDGE . MASSACHUSETTS

U.S.A

